Chapter 2: Alternatives

Project Background and Objectives

The extension of Bear Creek Parkway has been a planned link in the Redmond street network for years. The primary purpose of the Bear Creek Parkway Extension is to support the goals and policies of the Redmond Comprehensive Plan (RCP, City of Redmond, 1995b) and the Downtown Transportation Master Plan (DTMP, City of Redmond 2003a).

The RCP establishes goals and policies for future development in Redmond and addresses issues related to land use, housing, employment, transportation, environmental protection, and others. The transportation element of the RCP includes guidance for transit improvements, bikeways, pedestrian improvements, new roadways, and roadway capacity improvements that are consistent with City and regional land use and growth strategies. As stated in the RCP (p. 122), the Redmond community has consistently indicated that the adequacy of transportation facilities, the performance of the transportation system, and the availability of travel options are among its highest priorities. Implementation of Bear Creek Parkway contributes to this priority.

The Bear Creek Parkway Extension is one of the projects included in the Transportation Facility Plan (TFP-RED-050a). The Transportation Facility Plan assures compliance with the City's adopted transportation service standards while supporting growth envisioned by the City's Land Use Plan (RCP Policy TR-16). The project also appears on the Transportation Facility Plan Map (TR-3A) as a minor arterial to be constructed.

Also included in the RCP is the City Center element, which includes a long-range transportation plan specifically for the downtown area. The City Center Arterial Street Plan (Map CC-3) shows the Bear Creek Parkway Extension as a collector arterial. The proposed extension connects to Redmond Way west of the Burlington Northern Santa Fe (BNSF) Railroad corridor, to 159th Place NE, and to Leary Way. However, the specific alignment of the Bear Creek Parkway Extension is neither specified nor constrained by the Comprehensive Plan.

The Bear Creek Parkway Extension is also identified as an important link in the DTMP. This Plan includes a transportation concept for Downtown Redmond that enhances mobility and economic vitality while maintaining a people-friendly environment. The guiding principles of this plan include:

- **Circulation:** A plan for Downtown Redmond should contribute to a comfortable pedestrian environment and address the issue of through-traffic.
- Parking: Parking in Downtown Redmond should be available for businesses, residents, and visitors and should support the pedestrian environment and the viability of transit in the downtown.
- Transit: A plan for downtown transit service and facilities should attain the goal
 of having transit, pedestrians, bicycles, and carpools be a significant share of the
 commute trips to and from the downtown.

- Parks and Open Spaces: A successful Downtown Redmond should include parks and open spaces that create a sense of place, that are linked, and that serve a variety of purposes.
- Land use: Downtown Redmond should include a variety of land uses that meet the residents' needs for employment, housing, shopping, recreation, entertainment, and cultural and community activities.
- Redmond and Cleveland Couplet: Future improvements to Redmond Way and Cleveland Street should contribute to and reinforce this area as Redmond's "Main Street".
- Railroad Right of Way: Any design for the BNSF right of way should take full advantage of this asset.

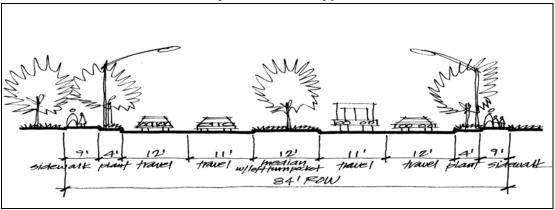
The DTMP concludes with an Action Agenda for Implementation, which outlines specific projects needed to achieve the Downtown Redmond vision. Because some other aspects of the Action Agenda depend on completion of the Bear Creek Parkway connection, the City Council has elected to pursue this connection as the first project.

The primary objective of the Bear Creek Parkway Extension is to fulfill the City's transportation goals as described in the RCP and DTMP (and outlined above). The City of Redmond is the project proponent.

Project Description

The Bear Creek Parkway Extension project would construct a new four- to five-lane roadway between the western end of the existing Bear Creek Parkway and Redmond Way. The roadway would consist of a single 11-foot inside driving lane in each direction and a single 12-foot outside driving lane in each direction. A 12-foot left-turn lane would be provided at all intersections. A 13-foot sidewalk/landscaping area is planned for both sides of the roadway. The total section width would be 84 feet except at intersections, where additional turn lanes may add additional width to the roadway. No bicycle lanes are proposed, in accordance with the Bicycle Network Concept. This Concept, developed as part of the DTMP, includes conversion of the BNSF Railroad corridor to include a multi-use trail to carry most east-west bicycle traffic through Downtown. Pedestrians will be accommodated with sidewalks on the new roadway and crosswalks at all major intersections. While not included in this project, future improvements may include grade-separated crossings of Bear Creek Parkway for non-motorized traffic. Figure 2.1 illustrates the proposed typical section for the Bear Creek Parkway Extension.

Figure 2.1
Bear Creek Parkway Extension: Typical Section



The project area includes a parcel referred to in this document as the King County maintenance shop site, located adjacent to the BNSF Railroad on the south side between 160th Avenue NE and Leary Way. The City of Redmond recently acquired this parcel from King County, and plans are underway to demolish the abandoned structures on the property. For the purposes of this Supplemental Draft Environmental Impact Statement (SDEIS), it is assumed that demolition will take place prior to construction of any build alternative, should one be selected. Therefore, the structures on this site are not considered to be acquisitions by the Bear Creek Parkway Extension project, and the portions of the parcel that would be used by each alternative are also not considered to be acquisitions. Despite this, the Land Use section of Chapter 3 does discuss the effects that each build alternative would have on this parcel.

Alternatives

This SDEIS analyzes a No Action Alternative and four build alternatives. The build alternatives all include the basic roadway section described previously, but vary in alignment and the configuration of connections to other downtown streets. Two of the build alternatives were developed in conjunction with the DTMP (described as Options A and C in that plan). Option B, the alignment illustrated in detailed drawings in the DTMP, was dropped because of its impacts on a known heron rookery. Two other alternatives were developed for analysis in this SDEIS. All of the build alternatives meet the goals of the Transportation element of the RCP, and the goal of a Bear Creek connection as stated in the DTMP.

No Action

The No Action Alternative assumes that Bear Creek Parkway would remain in its existing configuration and that no direct connection to Redmond Way would be provided. This alternative does not meet the RCP's goal to maintain adopted service level standards in the City's transportation facilities. The No Action Alternative also does not meet the DTMP's stated goal to provide a Bear Creek Parkway extension.

Alternative 1

Alternative 1 corresponds to Bear Creek Parkway Option A in the DTMP. Under Alternative 1, a new connection would be constructed beginning at the Bear Creek Parkway/164th Avenue NE intersection on the south side of Redmond Town Center RTC) (see Figure 2.2). This roadway would head northwest and connect to Leary

Way at the intersection of 159th Place NE, a distance of approximately 1350 feet. 159th Place NE between Leary Way and Redmond Way would be realigned and reconstructed to straighten the existing curve and provide an additional lane in each direction.

Leary Way between 159th Place NE and West Lake Sammamish Parkway would also be widened to the south by one lane, to accommodate the new Bear Creek Parkway/Leary Way intersection. This would include widening the existing Leary Way bridge over the Sammamish River. Bear Creek Parkway south of Leary Way would be maintained to provide access to RTC at NE 74th Street and to the pump station located south and west of this entrance point. The portion of the existing Bear Creek Parkway between the pump station and 164th Avenue NE would be removed.

Alternative 1 would involve reconfiguring and reconstructing the existing RTC water quality ponds (see Figure 2.3). The Sammamish River is an exempt receiving water body and detention would not be required. The Alternative 1 roadway would affect one of the existing ponds. A portion of the pond would be filled and a 12,256-square foot (0.3-acre) area adjacent to the existing pond would be excavated to compensate for the lost volume. A new culvert crossing under the roadway would connect the RTC ponds. Two new, separate ponds would be required: the first within the existing open space, approximately 9109 square feet in area and four feet deep, and the second pond near Leary Way and 159th Place NE where there is an existing bioswale. This pond would be approximately 9010 square feet and 10 feet deep (reflecting the current depth of the bioswale). These ponds would be designed for water quality treatment only, in accordance with the Department of Ecology (Ecology) Stormwater Management Manual for Western Washington, 2001 edition. Water from these ponds would discharge through a new outfall to the Sammamish River upstream of the Leary Way bridge, at the same location where water from the existing wetponds is discharged.

Alternative 2

Alternative 2 corresponds to Bear Creek Parkway Option C in the DTMP. Under Alternative 2, a new connection would be constructed, beginning at the Bear Creek Parkway/NE 74th Street intersection at the entrance to RTC (see Figure 2.4). This new roadway would be aligned just northeast of the existing Bear Creek Parkway alignment and would create a new intersection with Leary Way. The roadway would curve around to the west, skirt the edge of the wooded parcel containing the heron rookery, and pass through the abandoned (city-owned) King County maintenance shop site. The roadway would connect with the existing east-west 159th Place NE alignment at the curve, parallel to and south of the BNSF Railroad corridor. 159th Place NE would be reconstructed between the curve and Redmond Way to add an additional lane in each direction. A portion of Leary Way between Bear Creek Parkway and 159th Place NE would be widened to accommodate a new turning lane.

One new water quality treatment pond with a footprint of approximately 11,221 square feet in area and four feet deep would be constructed by excavating a portion of the open space north of the existing RTC ponds (see Figure 2.5). These ponds would also be designed for water quality treatment in accordance with the Ecology Stormwater Management Manual for Western Washington, 2001 edition. Portions of the roadway runoff would also be diverted to a roadside biofiltration swale to be constructed adjacent to the westerly side of the roadway. Water south of Leary Way would be conveyed to the water quality ponds by tight-line storm drain piping.

Treated water would be discharged through a new outfall to the Sammamish River in the same way as Alternative 1. The Alternative 2 roadway would not affect the existing RTC ponds.

New traffic signals would be provided at the Bear Creek Parkway/Leary Way intersection and the Bear Creek Parkway/159th Place NE intersection.

Alternative 3

Alternative 3 is a new alignment developed since adoption of the DTMP. Alternative 3 would provide a new connection beginning at the Bear Creek Parkway/NE 74th Street intersection (see Figure 2.6). Like Alternative 2, the new roadway would be aligned just northeast of the existing Bear Creek Parkway and would create a new intersection at Leary Way. At this point, the road would continue generally north, again skirting the wooded parcel containing the heron rookery and crossing through the abandoned King County maintenance shop site. The roadway would cross the BNSF Railroad corridor (at grade) and Cleveland Street and connect to Redmond Way at 161st Avenue NE. New intersections would be created at Bear Creek Parkway and Cleveland Street, and a southern leg would be added to the 161st Avenue NE/Redmond Way intersection. A portion of Leary Way between Bear Creek Parkway and 159th Place NE would be widened to accommodate a new turning lane.

Water quality for Alternative 3 would be managed similar to Alternative 2, with the addition of a single wet pond approximately 9216 square feet in area and four feet deep, in a similar location as Alternative 2 (see Figure 2.7). Treated water would be discharged to the Sammamish River via the same mechanism as Alternative 1.

A new traffic signal would be provided at the Bear Creek Parkway/Leary Way intersection.

Alternative 4

Alternative 4 is a combination of Alternatives 2 and 3 (Figure 2.8). It would provide the same connection of Bear Creek Parkway to 159th Place NE and Redmond Way, as in Alternative 2. In addition, a connection originating from the new Bear Creek Parkway near the King County maintenance shop site would head north across the BNSF Railroad corridor (at grade), cross Cleveland Street, and connect with Redmond Way at 161st Avenue NE. This northern connection to 161st Avenue NE would consist of a single lane in each direction and a center median/turn lane. Due to the proximity of the new Cleveland Street intersection with the existing Cleveland Street/Brown Street intersection, some reconfiguration and/or closure of this intersection may be required under Alternative 4. A portion of Leary Way between Bear Creek Parkway and 159th Place NE would be widened to accommodate a new turning lane.

Water quality for Alternative 4 would be managed similar to Alternatives 2 and 3, with the addition of a single wet pond approximately 13,310 square feet in area and four feet deep located within the existing Town Center open space (Figure 2.9). Treated water would be discharged via a new outfall to the Sammamish River in the same way as the other alternatives.

New traffic signals would be provided at the Bear Creek Parkway/Leary Way intersection and the Bear Creek Parkway/159th Place NE intersection.

Approximate costs for the Bear Creek Parkway Alternatives are shown in Table 2.1. These costs include design, right-of-way, earthwork, structures, pavement, drainage, utility work, traffic control, environmental mitigation, and contingencies.

Table 2.1: Costs

Alternative	Cost (2003 dollars in millions)
No Action	
Alternative 1	\$30.1
Alternative 2	\$27.2
Alternative 3	\$25.3
Alternative 4	\$34.8